

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-001762**Date Inspected:** 15-Mar-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1730**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Hu Wei Qing, Sun Wei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower & OBG**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

Bay 1 OBG:

The QA Inspector randomly observed ZPMC welders Song Bao ID Number 037772 and Sheng Qizhen ID Number 059401, utilizing the Gas Metal Arc Welding (GMAW) Process with ZPMC Weld Procedure Specification (WPS) WPS-B-T-2342-U1(Urib)-3, to tack weld closed ribs during fit up on Deck Plate DP378/PL452A. The QA Inspector randomly observed ZPMC CWI Sun Wei monitoring weld parameters. Weld parameters appeared to comply with contract requirements.

The QA Inspector recorded Visual Inspection data on a separate spreadsheet for Deck Plate DP108-001 Weld Joint (WJ) Numbers 001 through 008.

Bay 7 OBG:

The QA Inspector randomly observed ZPMC Non-Destructive Testing Technician Zhong Dongyun, utilizing the Magnetic Particle Testing (MT) Method, to examine the cover passes on the fillet welds attaching stiffeners and flanges to Floor Beam Sub-Assembly FB008-03. There appeared to be no indications and Mr. Zhong accepted all welds.

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The QA Inspector randomly observed ZPMC Non-Destructive Testing Technician Cai Xin Xin, utilizing the MT Method, to examine the cover passes on the fillet welds attaching stiffeners and flanges to Floor Beam Sub-Assembly FB025-02. There appeared to be no indications and Mr. Cai accepted all welds.

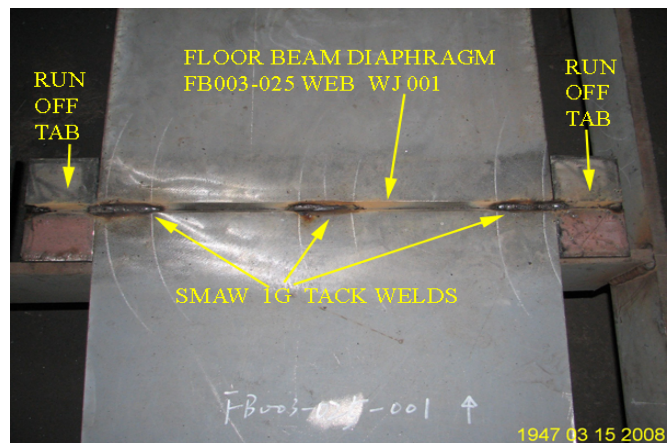
The QA Inspector randomly observed ZPMC Non-Destructive Testing Technician Bo Ting Rei, utilizing the MT Method, to examine the cover passes on the fillet welds attaching stiffeners and flanges to Floor Beam Sub-Assembly FB022-02. There appeared to be no indications and Mr. Bo accepted all welds.

The QA Inspector randomly observed ZPMC Welder Ren Jinzhu ID Number 044837, utilizing the SMAW Process in the 1G (Flat Groove) Position with ZPMC WPS WPS-B-P-2211-U2-FCM, to tack weld Floor Beam Diaphragm Web Sections together. The QA Inspector randomly observed ZPMC CWI Hu Wei Qing, monitoring weld parameters. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC Welders Wang Lingjiang ID Number 051356 and Chen Chuan Zong ID Number 044824, utilizing the Flux Cored Arc Welding (FCAW) Process with Hitronic HIT-18-1D Automatic Welding Carriages and ZPMC WPS WPS-B-T-2132-3 in the 2F (Flat Fillet) position, to weld various stiffeners to Floor Beam Sub-Assembly FB003-11. The QA Inspector randomly observed ZPMC CWI Hu Wei Qing monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 306 amps, 29.7 volts with a travel speed of 457 mm per minute for Mr. Wang and 302 amps, 29.9 volts with a travel speed of 451 mm per minute for Mr. Chen. Weld parameters appeared to comply with contract requirements.

Bay 8 OBG:

The QA Inspector randomly observed ZPMC welding personnel, utilizing the Carbon Air Arc Gouging Process to back gouge the seam weld between piece marks SA326(S) and p632(S) of 47.6M BTM SA326(S) Tower Diaphragm Sub-Assembly. The attached photograph provides additional detail.



Summary of Conversations:

As noted in the above body of this report.

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Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Franco,Charlie
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Quality Assurance Inspector

Reviewed By:	Hager,Craig
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QA Reviewer
